REMARKS/ARGUMENTS

Reconsideration and further examination of the present Application is requested. Claims 2-7 and 16-17 were pending in the case originally filed 07/11/2005. These were rejected in a Final Office Action mailed 11/28/2006. Applicant filed a Notice of Appeal 02/23/2007, but did not file an Appeal Brief. Instead, the accompanying Request for Continued Examination (RCE) is being filed together with this Preliminary Amendment. A petition for extension of time is included, together with the appropriate fees needed for the RCE.

In reviewing the prosecution history of the Application, it appears that the Claims should be restructured and restated so that the allowability of the intended subject matter is more clearly apparent. Therefore, Claims 2-7 and 16-17 are canceled, and Claims 18-21 are added. The element numbers from Fig. 2 of the present application are included in the claim recitations to help demonstrate that no new matter is being added herein. In some instances, more common terminology for the elements is being used in the recitations, and the inclusion of index numbers helps show which elements of Fig.2 are being refererred to exactly.

Previously, Heinrich, et al., US 6470393, was cited by the Office as anticipating the claimed present invention. Such does teach a similar solution to the same problem of conserving power in a data network, but there are distinct and substantial differences. Heinrich '393 involves only one stage of power control, and it requires addressing to engage the power control. Column 2, lines 61-65. When a data node is properly addressed, as recognized by an activating filter (AF), an associated microcontroller (MC) is switched between inactive and active modes using a voltage controller (UR). The address filters and bus transceivers are constantly drawing power, albeit far less than the microcontroller would if it was used to decode addresses as in the prior art.

The Office admitted that Heinrich '393 does "not explicitly mention that the protocol controller (address filter) is turned off during a low power mode." But pointed to Column 2, lines 52-55. Heinrich '393 also does not teach first and second voltage controllers (32 and 36) as are claimed in the newly added Claims 18-21. Heinrich '393 shows only one voltage controller (UR) in data node (DK), e.g., Fig. 2. There is also only one level of wakeup (WE).

In the claimed present invention, the data bus transceivers (34), pattern decoder (42), and applications processor (44) are all placed in low power modes. Data activity on the bus will be sensed in a first stage of power control (32) that powers up the data bus transceivers (34) and the pattern decoder (42). For example, the difference between low power and high power modes in the data bus transceivers can be the powering up the bus transmitters so the pattern decoder and application processor can talk back to the data bus.

Once a data pattern has be recognized, e.g., by matching to stored pattern values, a second stage of power control (36) powers up the applications processor (44). Embodiments of the present invention therefore employ two voltage regulators (32 and 36) per node (12) to implement the two stage power control. Data activity on a previously quiet data bus will temporarily wake up all the pattern decoders (42) in all the nodes (12), but only those nodes recognizing their target patterns will power up the applications processor (44) for the respective node (12). Embodiments of the present invention will therefore conserve far more battery energy during long periods of inactivity. For example, cars are parked and turned off far more hours than they are actually being driven and turned on.

Respectfully submitted,

Date: May 14, 2007

By _____
Richard B. Main, Reg. No. 33258
(916) 226-6745

Correspondence Address:

Intellectual Property & Standards
Philips Electronics North America Corporation
1109 McKay Drive; Mail Stop SJ41
San Jose, CA 95131 USA

24738
24738
PATENT TRADEMARK OFFICE